



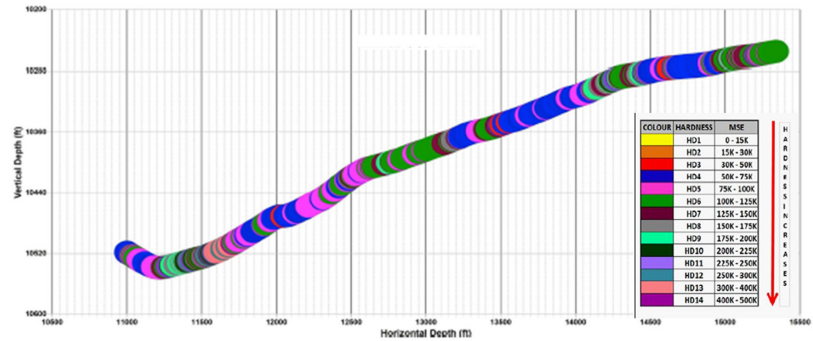
A cost-effective, customizable solution that maximizes the effectiveness of fracturing heterogeneous rock by analyzing the rock mechanical data commonly obtained during drilling

Increasing Production with Cluster Efficiency

OmniLog™ Lateral Profile

Every lateral is unique. Superior well performance can be achieved through a better understanding of the rock and reservoir properties in each well. The **OmniLog lateral profile** provides that understanding.

Drill2Frac uses drilling performance data to develop rock property information. The OmniLog presentation identifies rock property heterogeneity that, if not considered in completion design, can reduce stimulation effectiveness in horizontal wells. The system uses a proprietary six-step process to refine the collected data and create an accurate log of rock properties that can be used stand-alone, or as input into the **PerfAct applications**.



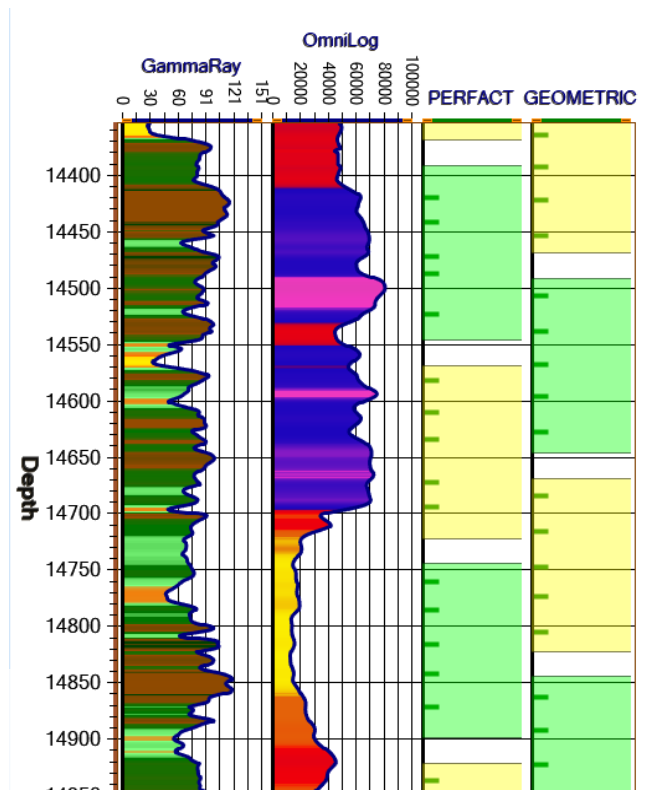
PerfAct™ Completion Engine

The PerfAct calculation engine uses OmniLog profiles and other well data to provide a holistic solution to optimize perforation placement, diversion design, re-stimulation candidate selection, and stage selection.

- The PerfAct engine combines efficiency, scalability, and repeatability when optimizing cluster efficiency and stage placement.
- Every solution from PerfAct is based on the unique characteristics of the well, and incorporates local expertise in the results.

“OmniLog profile exhibits a good correlation to the calculated Young’s modulus in the pilot well.”

— D2F Client



PerfAct Applications

The OmniLog profile and PerfAct engine combination can be used for a variety of completion, recompletion, and optimization applications. Most applications can be delivered in a matter of days, and in some cases as little as 24 hours.

Perforation Placement

As opposed to simply shifting one or two clusters based on a single attribute, the PerfAct Engine evaluates every cluster location within a stage, using a holistic approach that simultaneously compares multiple log properties. Proprietary computer algorithms use this data to place all perforations in the ideal location relative to both the reservoir as well as all other clusters within that stage.

Refrac Candidate/Protection Fracs Evaluation

OmniLog evaluates historical wells and allows the creation of a mechanical properties log using the original drilling data and requires no additional interventions. When this data is combined with the PerfAct Engine, estimations can be made as to how the original fractures were distributed along the wellbore, which can highlight areas that were originally over or under-stimulated.

Engineered Diversion

The Drill2Frac Engineered Diversion service takes advantage of rock property heterogeneity for more predictable diversion treatment design. Results show that Engineered Diversion can improve diverter effectiveness by up to 50% when compared to trial-and-error techniques.

Completions Consulting

The OmniLog lateral profile is the basis for all completion recommendations, incorporating additional information such as mud logs, gas shows, mass spectroscopy analyses, etc., into the completion recommendation. Our Completion Consulting is a collaborative process where Drill2Frac's technical experts work with clients in designing a customized solution for each well.

Contact us to learn more about our cost-effective solutions.

DRILL 2 FRAC[®]

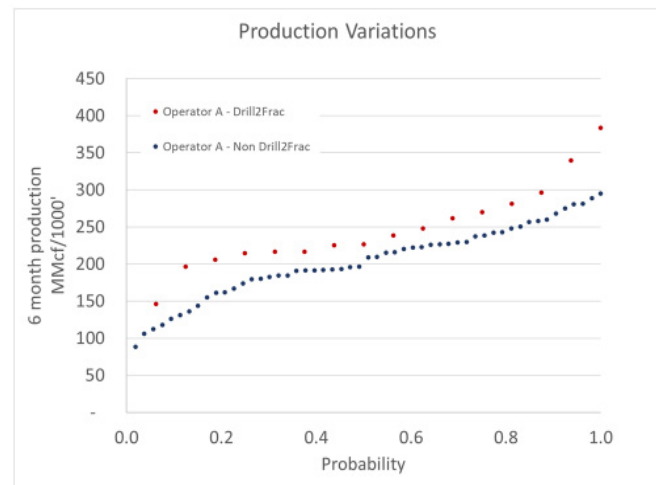
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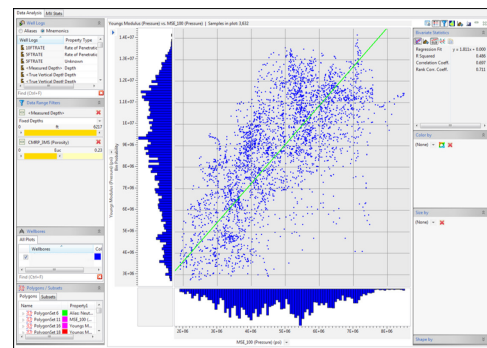
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Drill2Frac Results

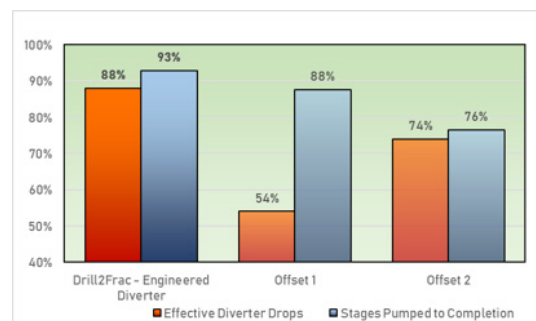
Comparing well performance from geometric completion designs to those designed with the OmniLog profile show average production improvements of **22%**.



Well Plots show a significant increased production in gas wells that used Drill2Frac data for perforation optimization.



The regression analysis shows a reasonable correlation between OmniLog profile and Young's Modulus.



Pressure response for similar wells on same pad showed that diversion drops were on average 37.5% more effective when designed around lateral heterogeneity.